ITEM 686.520603M CONDUIT PVC SCHEDULE 80 - 25 mm Dia.
ITEM 686.520606M CONDUIT PVC SCHEDULE 80 - 50 mm Dia.
ITEM 686.520608M CONDUIT PVC SCHEDULE 80 - 75 mm Dia.
ITEM 686.520610M CONDUIT PVC SCHEDULE 80 - 100 mm Dia.

DESCRIPTION:

Work under this item shall include furnishing and installing new PVC Schedule 80 conduit as shown on the plans, or as directed by the ENGINEER.

MATERIAL AND METHODS:

Conduit and fittings are to be Schedule 80, rigid, extra-heavy wall polyvinyl chloride (PVC) conduit as specified by Underwriter Laboratories Standard UL-651. The conduit is to meet the specifications included in the NEMA Standard Specification TC-2 for electrical plastic conduit EPC-80.

In the case of conflicting test requirements, the more stringent of the test requirements is to be met.

The conduit shall be placed within the trench and shall have a minimum cover of at least 0.45 m, except under roadways where the minimum cover shall be 0.6 m, unless specified otherwise on the plans. Conduit installed under roadways shall extend at least 0.3 m behind the face of the curb, or as approved by the ENGINEER. The conduit shall be laid on a uniform grade to allow any condensation to drain to pull boxes.

The conduit fittings shall be assembled in the trench in accordance with the manufacturer's latest instructions and as approved by the ENGINEER. The joints shall be cemented in accordance with Federal Specification W-C-1094A and Underwriter Laboratories Standard UL-514. The joint cement solvent shall meet the requirements of ASTM D2564, or alternately be of the type recommended by the conduit manufacturer. Warning tape shall be placed in the open cut trenches approximately 150 mm above the conduit.

All bends in the conduit shall be made without kinking, flattening, or appreciably reducing the internal diameter of the conduit.

All conduit connected to pullboxes and handholes shall be installed flush with the inside wall and a minimum of 75 mm above the bottom of the floor.

All conduit shall be tested for clear bore and correct installation, using a mandrel, brush and snake, before the installation will be accepted. The mandrel shall be turned approximately 85 percent of the internal diameter of the conduit to be tested. Two short wire brushes shall be included in the mandrel assembly. Snaking of conduits shall be done in the presence of the ENGINEER. All conduit which rejects the mandrel shall be cleared. After providing a 2.2 kN nylon pull cord in the conduit, all empty conduit and

duct openings shall be plugged with a tapered hard rubber plug. At least 1 m of extra rope shall be left at each end.

BASIS OF ACCEPTANCE

The conduit shall be accepted upon the basis of the manufacturer's certification that it meets the requirements of this specification, as well as being Underwriters Laboratory Listed. Fittings, couplings, and solvent cement shall be accepted upon the manufacturer's certification that they meet the requirements of this specification.

METHOD OF MEASUREMENT:

The quantity to be measured for payment shall be the number of lineal meters of conduit installed in accordance with the contract documents and as directed by the ENGINEER.

BASIS OF PAYMENT:

The unit bid price for this item shall include the cost of furnishing and installing new conduit, fittings, warning tape, pull cord, couplings and insulating bushings; cementing of the joints and fittings; testing for clear bore and correct installation; connecting conduit to handholes, pullboxes, existing conduit, traffic signal pole and cabinet foundations, and other related items. Payment for trenching, boring, and surface restoration shall be included under other items.

Payment will be made under:

Item No.	Item	Pay Unit
686.520603M	Conduit PVC Schedule 80 - 25 mm Dia.	m
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